

App. No. 09/848,625
Amendment Dated September 17, 2003
Reply to Office Action of June 17, 2003

REMARKS/ARGUMENTS

Claims 1-31 are pending in this application. The Office Action, dated June 17, 2003, rejected claims 1-31. Claims 3-4, 14-18, and 21-26 have been cancelled. Claims 1, 7, 8, and 27 have been amended to clarify the invention. No new matter has been added by this amendment. Claims 32-33 have been added. Claims 32-33 are similar to claim 8, albeit different in important ways. No new matter has been added thereby.

Claim Rejections – 35 USC § 112

Claims 8-13, 17, 18 and 27-31 have been rejected under 35 USC 112, second paragraph, as being indefinite with the combination of limitations not corresponding to any of the applicants' own figures. Regarding claims 8-13 and 27-31, applicants submit that claims 8 and 27 as amended are not indefinite (and are allowable) because the limitations of claims 8 and 27 are illustrated in Fig. 7 in accordance with certain aspects of the claims limitations. The claims have been amended to clarify that the first and second signals determine the logic state of an input pin of the circuit. Accordingly claims 8-13 and 27-31 are submitted to be patentable.

Claims 17-18 have been cancelled.

Claim Rejections – 35 USC § 102

Claims 1-3, 5-7, and 19 have been rejected under 35 USC 102 (b) as being anticipated by U.S. Patent No.5,999,039 to Holst et al. (Holst). Regarding claim 1, applicants submit that claim 1 as amended is allowable because Holst fails to disclose a signal transfer circuit comprising a transistor having a first non-control terminal that is arranged to receive a supply signal, a control terminal that is coupled to ground, and a second non-control terminal that is arranged to output a

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first signal during normal operation to a pin of the circuit and to a charge storage circuit, wherein the circuit is powered by the first signal during normal operation.

In contrast, Holst teaches a transistor N2 having a gate that is connected to node 108, across which is the dominant source of capacitance of the circuit to ground (col. 4, lines 23-24). If node 108 were grounded, the capacitance (if any) would be discharged immediately and the circuit of Holst would be rendered inoperative. Claims 5-17, and 19 depend from claim 1 and are submitted to be patentable for (at least) the reasons stated above. Claim 3 has been cancelled.

Claims 1,2, 4-6, and 17-19 have been rejected under 35 USC 102 (b) as being anticipated by U.S. Patent No.5,608,684 to Reasoner et al. (Reasoner). Regarding claim 1, applicants submit that claim 1 as amended is allowable because Reasoner fails to disclose a signal transfer circuit comprising a transistor having a first non-control terminal that is arranged to receive a supply signal, a control terminal that is coupled to ground, and a second non-control terminal that is arranged to output a first signal during normal operation to a pin of the circuit and to a charge storage circuit, wherein the circuit is powered by the first signal during normal operation.

In contrast, Reasoner teaches a power supply circuit consisting of a series resistor 122 a zener diode 126 (col. 4, lines 35-36), and a diode 124 (col. 4, lines 32-38). Zener diode 126 and diode 124 cooperate to produce a voltage of 5 volts at junction 130. Accordingly, no transistor is disclosed. Claims 2, 5-6 and 19 depend from claim 1 and are submitted to be patentable for (at least) the reasons stated above. Claims 4 and 17-18 have been cancelled.

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Claims 1-7 and 19 have been rejected under 35 USC 102 (b) as being anticipated by U.S. Patent No. 4,649,291 to Konishi. Regarding claim 1, applicants submit that claim 1 as amended is allowable because Konishi fails to disclose a signal transfer circuit comprising a transistor having a first non-control terminal that is arranged to receive a supply signal, a control terminal that is coupled to ground, and a second non-control terminal that is arranged to output a first signal during normal operation to a pin of the circuit and to a charge storage circuit, wherein the circuit is powered by the first signal during normal operation.

In contrast, Konishi teaches a transistor 22 having a gate that is connected to a junction between the MOS transistors 21-P and 21-Q which are a part of the series of NMOS transistors 21-1, ..., 21-P, 21-Q, ..., and 21-N which are connected in series between a voltage line VL, to which a voltage equal to a power supply voltage VC1 is supplied, and the ground (col. 1, lines 51-57). A reference voltage VR is applied to the gate of the MOS transistor 22 (col. 1, lines 66-67). This reference voltage VR is obtained by dividing the power supply voltage VC1 in accordance with a ratio between a reciprocal of the conductance of the MOS transistor 21-P and a reciprocal of the conductance of the MOS transistor 21-Q to 21-N. Accordingly, the voltage of the gate of transistor 22 is at voltage VR, which is not at ground. Claims 2, 5-7 and 19 depend from claim 1 and are submitted to be patentable for (at least) the reasons stated above. Claims 3-4 have been cancelled.

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Claim Rejections – 35 USC § 103

Claims 3 and 7 have been rejected under 35 USC 103 as being unpatentable over Reasoner. Regarding claim 7, the office action asserts that it would have been obvious to one of ordinary skill in the art to use appropriately configure MOS type transistors to replace the resistor and diodes within charge storage circuit 132. Applicants traverse this assertion. Introducing the transistors as a replacement for the diodes and resistor introduces the very same problem that the second transistor is purported to solve, namely body diode leakage. Accordingly it would not be obvious to replace the transistors to solve a problem that did not exist until a transistor replacement had been made. Accordingly, claim 7 is not unpatentable over Reasoner and is submitted to be allowable. Claim 3 has been cancelled.


Claims 20-26 have been rejected under 35 USC 103 as being unpatentable over Holst and Konishi. Claim 20 is (at least) allowable for the reasons given for claim 1. Claims 21-26 have been cancelled.

In view of the foregoing amendments and remarks, all pending claims are believed to be allowable and the application is in condition for allowance. Therefore, a Notice of Allowance is respectfully requested. Should the Examiner have any further issues regarding this application, the Examiner is requested to contact the undersigned attorney for the applicant at the telephone number provided below.

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Respectfully submitted,

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